



CONTACT: Eric Baird, Greencastle Middle School

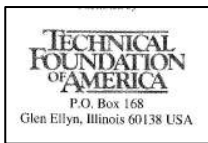
Telephone: 765-653-9774 ext 142

Email: ebaird@greencastle.k12.in.us

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Best Practices in Technology Education: Green Technology Recognized by the Technical Foundation of America

Description of Best Practice:



Students at Greencastle Middle School in Greencastle, Indiana are presented with a problem to create a piece of furniture made entirely from recycled and “unorthodox” items. Working in teams, students must incorporate at least three different materials to make their “new” piece of furniture. Since the students are not allowed to purchase materials their solution must be made entirely from scrounged materials. As a result of this problem, students have created a wide assortment of furniture pieces from a variety of recycled items such as tire rims, old tarps, foam insulation, and broken products. For example, one team recently made a fold-up bed from old closet doors. This activity has received much support from the school’s administration and has also received positive public relations in local newspapers.

Students begin the unit by conducting intensive research about recycling. During this process, they learn about how important it is to recycle and where some of the greatest problems occur including furniture recycling. This process helps to develop in them an appreciation for recycling and it helps motivate them to be creative in their solution to a problem. Students collect materials and bring them into the “Green Technology” classroom/laboratory where they design, build and evaluate their solutions over a period of several weeks. During the course of completing the unit, student teams are expected to develop their concept, build it using tools/machines in the laboratory, and defend their design.



Through this activity, students begin to ask a lot of good questions about design and recycling, as well as technical questions about how to combine materials using tools and machines. They learn to become more independent because of the open-ended nature of the problem and the need for them to show initiative in identifying and locating the materials that they need to solve the problem. Since they work in small groups, they must also develop teamwork skills in order to have a successful solution to the problem. Furthermore, this activity helps them understand and interact with technology in their world and see that they can be part of the solution to the recycling problem by being creative, technological problem-solvers.

Key contact person:

Eric Baird

Greencastle Middle School

Telephone: 765.653.9774

Email: ebaird@greencastle.k12.in.us

Best Practices in Technology Education:

A Collection of 21st Century Best Practices in Technology Education
is available for educational purposes at:

<http://teched.vt.edu/ctte/>